REMARKS

I.   Status of the Application

Claims 1-2, 11-21 and 24-26 are pending in this application. In the November 20, 2008 Final Office Action, the Examiner:

A.   Rejected claims 1-2, 11-12 and 22-24 under 35 U.S.C. § 103(a) as being allegedly being unpatentable over U.S. Patent No. 5,757,795 to Schnell (hereinafter "Schnell") in view of U.S. Patent No. 5,394,402 to Ross (hereinafter "Ross");

B.   Rejected claims 13-16 under 35 U.S.C. § 103(a) as being unpatentable over Schnell in view of Ross and further in view of U.S. Patent No. 6,658,027 to Kramer et al. (hereinafter "Kramer");

C.   Rejected claims 17-18 under 35 U.S.C. § 103(a) as being unpatentable over Schnell in view of U.S. Patent No. 7,154,899 to Khill (hereinafter "Khill");

D.   Rejected claims 19 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Schnell in view of Khill and further in view of Ross; and

E.   Rejected claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Schnell in view of Khill and further in view of Ross and Kramer.

Applicants gratefully acknowledge the comments in the Advisory Action dated February 12, 2009. Those comments are taken into account in this response. The applicants have amended claims 1, 17 and 24 to clarify the claimed subject matter therein. Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the accompanying remarks.

II.   Obviousness Rejection of Claim 1

Claim 1 stands rejected as allegedly being rendered obvious over Schnell in view of

Ross. Claim 1 has been amended. ‘As will be discussed below in detail, the proposed

combination of Schnell and Ross does not arrive at the invention of amended claim 1. As a

consequence, it is respectfully submitted that the obviousness rejection of claim 1 should be

withdrawn.

A.   Present Invention

Claim 1 is directed to a data switch having a plurality of ingress/egress ports and for

transmitting data packets including a destination address. The data switch has an address

table construction means for generating a table containing associations between ports of the

switch and MAC addresses of any devices connected to the switch via those ports. The

address table construction means is configured to construct said table in respect of all but a

first one of the ports. As amended, the data switch is configured to not insert an association

between a certain MAC address and said first one of the ports into said table *when* the data

switch identifies that the certain MAC address is associated with said first one of the ports.

In other words, the data switch is configured to not insert an association between a

certain MAC address and the first port *responsive* to an identification that this MAC address

is associated with the first port. Claim 1 as amended reflects the purposeful and intentional

omission of a certain addresses from the table *because* they are associated with the first port.

B.   The Examiner's Proposed Combination

The Examiner has combined the teachings of Schnell and Ross to allegedly arrive at the invention of claim 1. (See Final office action at pp.2-3). The Examiner has admitted that Schnell fails to teach or suggest the "address table construction means being operable to construct said table in respect of all but a first one of the ports", as claimed.

To satisfy this shortcoming of Schnell, the Examiner cited the teachings of Ross. In particular, the Examiner has alleged that Ross teaches storing addresses of all connected devices and associating them with ports except for an "external port 18". (*Id.*) Applicants have previously argued that Ross in fact teaches storage of the addresses of all end devices, including those connected to the "external port 18". (See, e.g. January 21, 2009 Response to Final Office Action at pp.3-5). To this end, Ross teaches in various places that the MAC address of devices coupled via the "external port 18" may or are stored. (*Id.*)

In response thereto, the Examiner clarified that Ross teaches that such addresses of devices coupled through the port 18 *may* be stored. Thus, storage of MAC addresses of devices coupled through the port 18 would be stored in some cases, and not in others. (See Advisory Action a p.2).

C.   The Proposed Combination Does Not Arrive at Amended Claim 1

As mentioned above, claim 1 has been amended to recite "the data switch is configured to *not* insert an association between a certain MAC address and said first one of the ports into said table *when the data switch identifies that the certain MAC address is associated with said first one of the ports*". In other words, claim 1 clarifies that the data

switch first identifies that certain MAC addresses area associated with the first port, and then, responsive to such identification, purposefully refrains from inserting the association into the table. Support for this amendment may be found in the International Application as filed at page 2, lines 8-12 and page 5, lines 21-25.

The proposed combination of Schnell and Ross fails to disclose this feature. In particular, as discussed above, the Examiner relies on Ross as teaching forming of a table wherein the MAC addresses of devices associated with a certain port are not stored. However, even if it is assumed that Ross may in some cases not store MAC addresses of devices connected to its external port 18, Ross does not teach or suggest the how or why Ross device elects not to store such MAC addresses. Ross certainly does not teach or suggest that its device first *identifies* a MAC address as being associated with the port 18, and then determines that it will not be stored. Nor is such an operation inherent.

Accordingly, the proposed combination of Schnell and Ross fails to disclose or suggest "the data switch is configured to *not* insert an association between a certain MAC address and said first one of the ports into said table *when the data switch identifies that the certain MAC address is associated with said first one of the ports*", as set forth in claim 1 as amended.

For at least this reason, it is respectfully submitted that the rejection of claim 1 should be withdrawn.

III.   Claim 24

Independent claim 24 also stands rejected as allegedly being obvious over Schnell and

Ross. Independent claim 24 is directed to a method of operating a data switch for switching

data packets that includes the limitation:

> wherein an association between a certain MAC address and said first one of the ports is
> not inserted into said table when the certain MAC address is identified as being associated with
> said first one of the ports

As discussed above in connection with claim 1, even if Schnell and Ross were

combined as proposed, they would not arrive at a device that elects to *not* insert a MAC

address into a table *when* (i.e. responsive to) such address being associated with a particular

port.

For the foregoing reasons, which are discussed in detail above in connection with

claim 1, it is respectfully submitted that the rejection of claim 24 over Schnell and Ross

should be withdrawn.

IV.   The Rejection of Dependent Claims 2, 11-16, 25 and 26

In the Final Office Action, the Examiner rejected each of dependent claims 2, 11-16,

25 and 26 under 35 U.S.C. § 103(a). Each of dependent claims 2, 11-16, 25 and 26 depend

from and incorporate all of the limitations of one of independent claims 1 or 24. As set forth

above, independent claims 1 and 24 are patentable over the prior art. Therefore, each of

dependent claims 2, 11-16, 25 and 26 is also patentable over the prior art for at least the same

reasons as claims 1 and 24. Accordingly, it is respectfully submitted that the examiner's

rejection of dependent claims 2, 11-16, 25 and 26 should be withdrawn.

V.   Independent Claim 17

In the Final Office Action, the Examiner rejected claim 17 under 35 U.S.C. § 103 (a) as being unpatentable over Schnell in view of Khill. Applicant respectfully traverses this rejection.

A.   Background of Status of Claim 17

Claim 17 includes, inter alia, the following limitations:

> stopping generation of the table before MAC addresses of at least some devices operably coupled through the first ingress/egress port are associated with the first ingress/egress port in the table".

The Examiner has admitted that Schnell does not teach this feature. However, the Examiner alleges that Khill teaches this claim limitation.

In response, Applicant has previously argued that Khill does not teach or suggest "stopping generation" of the table before devices coupled through the first ingress/egress port are associated with that port. In reply, the Examiner has stated that Khill teaches a "budgeted learning process" that updates a filtering database that associates a port with a MAC address. This "budgeted learning process" will stop updating the database "if the budget of entries is exhausted". (See Final Office action at pp.13-14). Further, the Examiner notes that while such a process does not necessarily stop generation before at least some addresses associated with a first port are added, it is possible that Khill process *can* stop before at least some of the addresses associated with a first port are added. (*Id.*; See also Advisory Action). Accordingly, the operation of Khill could, although not with specific purpose, satisfy the limitations of claim 17.

B.   The Proposed Combination Does Not Arrive at Claim 17 as Amended.

Claim 17 has been amended to recite "discarding a data packet received from the first ingress/egress port that does not have a destination address associated according to the table with any of the other ingress/egress ports". In other words, claim 17 further recites specific actions relating the first port. These actions relate to the issues of not storing associations for addresses of devices on the first port. In particular, as claimed, a data packet received *from* the first port, and which does not have a destination addresses associated on the table with *other* ports, is discarded. Stated another way, if a packet is received on the first port, it is *only* retained if it has a destination address associated with one of the *other* ports. This retention of *only* those packets that have a destination address that is associated with *other* ports is facilitated by the fact addresses for destinations connected to the *first* port are *not stored* in the table.

Neither Schnell nor Khill teach or suggest such a limitation. Indeed because neither references specifically teaches purposefully stopping generation before storing addresses associated with the first port, Schnell and Khill would necessary retain packets having a destination address associated with the *first* port as well.

Accordingly, neither Schnell nor Khill, either alone or in combination, teach or suggest "discarding a data packet received from the first ingress/egress port that does not have a destination address associated according to the table with any of the other ingress/egress ports", as claimed in claim 17.
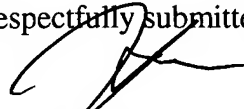
VI.   The Rejection of Dependent Claims 18-21 Under 35 U.S.C. § 103(a) Should be

      Withdrawn

      In the Final Office Action, the examiner rejected each of dependent claims 18-21

under 35 U.S.C. § 103(a). Each of dependent claims 18-21 depends from and incorporates all

of the limitations of independent claim 17. As set forth above, independent claim 17 is

patentable over the prior art. Therefore, each of dependent claims 18-21 is also patentable

over the prior art for at least the same reasons as claim 17. Accordingly, it is respectfully

submitted that the examiner's rejection of dependent claims 18-21 should be withdrawn.

VII. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicants have made a patentable contribution to the art. Favorable reconsideration and allowance of this application is, therefore, respectfully requested.

Respectfully submitted,

Harold C. Moore
Attorney for Applicants
Attorney Registration No. 37,892
Maginot Moore & Beck
Chase Tower
111 Monument Circle, Suite 3250
Indianapolis, Indiana 46204-5109
Telephone: (317) 638-2922